



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/924,676	08/08/2001	Willard A. Cutler	SP01-218	3657

22928 7590 07/25/2003

CORNING INCORPORATED  
SP-TI-3-1  
CORNING, NY 14831

EXAMINER

STRICKLAND, JONAS N

ART UNIT	PAPER NUMBER
----------	--------------

1754

DATE MAILED: 07/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

8

**Office Action Summary**

Application N .

09/924,676

Applicant(s)

CUTLER ET AL.

Examiner

Jonas N. Strickland

Art Unit

1754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Amendment***

1. This Detailed Action is in response to the amendment filed on 5/8/03 as Paper No. 7. The specification has been amended in order to correct a spelling error. Claims 10-14 have been cancelled, as being directed to a non-elected invention. Claims 1-9 are currently pending.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Harada et al. (EP 0450897 A2).

Harada et al. discloses a method for making a metallic monolith by mixing metal powders, an extrusion aid (oleic acid, p. 5, lines 48-50), and an organic binder to prepare a mixture, by forming the mixture into a shape of the desired honeycomb configuration (see abstract). Therefore, the honeycomb monolith disclosed by Harada et al. may be in the form of a wall flow or z-flow configuration, with respect to claims 8 and 9 based on the teachings of Harada et al. Harada et al. continues to disclose utilizing an extrusion die (p. 11, line 4). Harada et al. discloses carrying out a heat treatment under an oxidizing atmosphere and a reducing atmosphere in order to remove the carbon binder and to sinter the catalytic substrate (p. 5, line 52 – p.6, line

19). Harada et al. also discloses having a copper metal powder (p. 5, lines 31-32).

Harada et al. continues to disclose wherein the honeycomb monolith has porosity between 0 to 50% by volume, with respect to claim 4 (p. 6, lines 29-32). Furthermore, Harada et al. discloses wherein the honeycomb substrate has a washcoat comprised of alumina and a catalyst comprised of a precious metal, with respect to claims 6 and 7.

### ***Response to Arguments***

4. Applicant's arguments filed 5/8/03 have been fully considered but they are not persuasive.

Applicant argues that Harada et al. fails to require a two-stage heat treatment of formed honeycombs to completely remove impurities such as carbon, wherein the first heat treatment is in an oxidizing atmosphere, and a secondary treatment in a reducing atmosphere. Applicant continues to argue that Harada requires that both binder removal and sintering of the body be carried out in a non-oxidizing atmosphere. Applicant also argues wherein Harada uses only a minor copper constituent and is insufficient to teach or suggest Applicant's process for making copper and copper alloy honeycombs.

The Examiner has applied Harada et al., in order to teach a monolithic honeycomb, which may be comprised of copper and a method of making such a honeycomb, wherein the method requires a heat treatment in an oxidizing and reducing atmosphere, were the carbon binder is removed and wherein the substrate is sintered. It would have been anticipated by the Harada et al. reference to expect any remaining carbon impurities to have been removed from the oxidizing atmosphere, since Harada

Art Unit: 1754

et al. clearly discloses a method for making a metallic monolith by mixing metal powders, an extrusion aid, and an organic binder to prepare a mixture, by forming the mixture into a shape of the desired honeycomb configuration and then carrying out a heat treatment on the monolith substrate in an oxidizing and reducing atmosphere. It would have been anticipated for carbon impurities to be removed by the oxidizing treatment as disclosed by Harada et al.

Furthermore with respect to Applicant's argument that Harada uses only a minor copper constituent and is insufficient to teach or suggest Applicant's process for making copper and copper alloy honeycombs, the recited claims do not recite a desired amount of copper. The claims only require that the honeycomb monolith contain copper, which is met by the teachings of Harada et al.

5. Applicant's arguments, filed 5/8/03, with respect to the 35 U.S.C. 102(e) rejection of claims 1 and 3 as being anticipated by Beall et al. (WO 01/16049 A1) and the 35 U.S.C. 103(a) rejection of claims 2 and 4-9 over Beall et al. (WO 01/16049 A1) in view of Harada et al. (EP 0450897 A2) have been fully considered and are persuasive. The rejections have been withdrawn.

### ***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

Art Unit: 1754

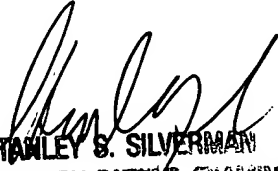
mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonas N. Strickland whose telephone number is 703-306-5692. The examiner can normally be reached on M-TH, 7:30-5:00, off 1st Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman can be reached on 703-308-3837. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-0661.

Jonas N. Strickland  
July 24, 2003

  
**STANLEY S. SILVERMAN**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 1700**